

**IN THE UNITED STATES PATENT & TRADEMARK OFFICE**

**PATENT APPLICATION**

**OF**

**DUANE LANGENWALTER**

**FOR**

**DECORATIVE FENCING SYSTEM**

Attorneys:

Grimes & Battersby, LLP  
488 Main Avenue, Second Floor  
Norwalk Connecticut 06851  
(203) 849-8300

Our File No. TH1006USU

**TITLE: DECORATIVE FENCING SYSTEM**

**BACKGROUND OF THE INVENTION**

**1. Field of the Invention**

5       The present invention relates generally to a decorative  
fencing system, and, more particularly, to such a decorative  
fencing system that includes multiple components and may be  
arranged in a potentially infinite number of combinations and  
permutations so as to be used as a small or low fence, or a  
10 decorative accent for a yard or walk, or even a combination  
thereof.

**2. Description of the Prior Art**

15       The prior art fails to specifically address either the  
problem or the solution arrived upon by applicant. Decorative  
fencing systems have long been known in the industry, as has the  
use of sectional fence structures to create various  
configurations for fencing systems. Some examples of such  
fencing systems are shown in patents that date back to the mid to  
20 late 1800s, such as, for example, U.S. Patent No. 807 to Jenkins  
for "Iron Fence" in 1859; U.S. Patent No. 6,411 to Healey for  
"Fences" in 1873; U.S. Patent No. 9,274 to Ricker for "Fence" in  
1876; U.S. Patent No. 207,518 to Hayden for "Fence" in 1878; U.S.  
Patent No. 284,687 to Tunica for "Girder Picket Fence" in 1883;  
25 U.S. Patent No. 336,405 to Ginther for "Fence" in 1886; U.S.

Patent No. 415,382 to Darnell for "Fence" in 1889; and U.S. Patent No. 563,042 to Le Flamboy for "Fence" in 1896.

Similar devices are also disclosed in U.S. Patent Nos. 5 1331117; 1426215; 2074688; 2484413; 2651502; 2709073. Another such device is disclosed in a recently filed U.S. application Pub No. US 2003/0155565 A1 for "Plastic Fencing Simulative of Wrought Iron."

10 As will be appreciated, none of these prior patents even address the problem faced by applicant let alone offer the solution proposed herein.

### SUMMARY OF THE INVENTION

Against the foregoing background, it is a primary object of the present invention to provide a decorative fencing system having several components that may be arranged in a limitless  
5 number of configurations or combinations.

It is another object of the present invention to provide such a decorative fencing system that may be used as a small or low fence, or a decorative accent for a yard or walk, or even a  
10 combination thereof.

It is still another object of the present invention to provide such a decorative fencing system that allows a user to purchase and use only those elements necessary to create the  
15 design or shape of her choosing.

It is another object of the present invention to provide such a decorative fencing system that is easy to assemble and disassemble.  
20

It is but another object of the present invention to provide such a decorative fencing system that may be either permanently or temporarily affixed to the ground.

25 It is another object of the present invention to provide such a decorative fencing system which includes all the elements

necessary to create a standard fence, including base units, gates and end units.

It is yet still another object of the present invention to  
5 provide such a decorative fencing system which may include a variety of interchangeable decorative elements.

It is but another object of the present invention to provide such a decorative fencing system in which the individual  
10 components are manufactured from a variety of materials or be provided with a variety of finishes.

To the accomplishments of the foregoing objects and advantages, the present invention, in brief summary, comprises a  
15 decorative fencing system designed to be used as a small fence or decorative accent for a yard, or combination thereof. The fencing system includes several different components that may be joined in various combinations so as to create a limitless number of different configurations or arrangements. The components  
20 include base units, decorative end units and gate units, each of which may be attached to the other components in any combination thereof. Each of these components are attached to post sections which are inserted through post rings or post hinges on the individual components to thereby allow for each component to be  
25 rotated to the desired position relative to the post section. The post sections are secured to the ground by means of stakes

that are first driven into the ground and the post section is then inserted into a sleeve in the stake to thereby provide support and stability for the fencing system. A separate and smaller pin is provided on the end units to anchor these

5 components to the ground.

### BRIEF DESCRIPTION OF THE DRAWINGS

The foregoing and still other objects and advantages of the present invention will be more apparent from the detailed explanation of the preferred embodiments of the invention in connection with the accompanying drawings, wherein:

FIG. 1 is a front elevational view of the decorative fencing system of the present invention showing the various components thereof.

FIG. 2 is an exploded front elevational view of the post and stake of the decorative fencing system of the present invention.

FIG. 3 are perspective views illustrating some of the various configurations of the decorative fencing system of the present invention.

## DETAILED DESCRIPTION OF THE INVENTION

Referring to the drawings and, in particular, to FIGS. 1 and 2 thereof, the decorative fencing system of the present invention, referred to generally by reference numeral 10, is illustrated. The fencing system 10 comprises separate structural components 12 including a base unit 14, gate unit 16 and end unit 18, which are arranged and combined with each other so as to create a potentially limitless number of configurations for the decorative fencing system 10.

10

The structural components 12 are attached to each other by means of one or more posts 20 to which the structural components 12 may be affixed. In the preferred embodiment, the means for attaching the structural components 12 comprises post rings 22, which are disposed on either end of the base units 14 or on one end of the end unit 18, or by post hinges 24, which are disposed on the outside edges of the gate units 16. The post rings 22 are essentially annular elements having an inner diameter slightly larger than the diameter or width of the posts 20 such that post 20 may be slidably inserted within the post rings 22 to thereby engage either the base unit 14 or end unit 18. Similarly the post hinges 24 including the same annular element similar to the post rings 22, coupled with a hinge 26 that allows the individual gate elements 28 of the gate unit 16 to swing open and shut. In the preferred embodiment the gate elements 28 comprise a pair of complementary doors that may be operated independently or

concurrently, although other designs are possible so as to fit with the design and theme of the decorative fencing system 10.

As illustrated in FIG. 1, each of the structural components 12 includes two post rings 22 or post hinges 24 at each end at which the component 12 may be attached to the post 20 - for example, the base unit 14 includes two post rings 22 on either side thereof, the gate unit 16 includes two post hinges 24 on the outside edge of each gate element 28, and the end unit 18 includes two post rings 22 on one side thereof. In the preferred embodiment, the post rings 22 or post hinges 24 are attached to a substantially vertical element 30 so that the post rings 22 or post hinges 24 are in alignment when receiving the posts 20. Of course, alternate embodiments are contemplated in which either the post rings 22 or post hinges 24 are attached to horizontal components or other elements provided, however, that the post rings 22 or post hinges 24 are in alignment. Furthermore, while in the preferred embodiment only two post rings 22 or post hinges 24 are disposed along each vertical element 30, more may be provided so as to further strengthen and secure the attachment of the structural components 12 to the posts 20.

It should also be appreciated that while in the preferred embodiment, the post rings 22 and post hinges 24 are disposed at the top and the bottom of the vertical elements 30, as shown in FIG. 1, they may be positioned at various heights along the

length of the vertical elements 30 as may be desired. For example, as illustrated in FIG. 1, the height of the upper post ring 32 on the base unit 14 is higher than that of the upper post ring 32 on the end unit 18, which, in turn, is higher than upper post hinge 34 on the gate unit 16. This configuration facilitates the combination of two or more structural components 12 since the post rings 22 or post hinges 24 will not necessarily interfere with each other. It should also be appreciated that in the preferred embodiment, contact should be avoided between the post hinges 24 and the post rings 22 so as to prevent interference with the operation of the hinges 26. Toward that end, it may be preferred to mount the lower post hinges 36 of the gate unit 16 above the lower post rings 38 of either the base unit 14 or end unit 18.

The decorative fencing system 10 is secured to the ground by means of one or more stakes 40. The stakes 40 are designed to be driven into the ground and receive the posts 20 to thereby support the structural components 12 in place. In the preferred embodiment, the stakes 40 are wedge shaped or include a plurality of fins so as to facilitate their insertion into the ground, although a variety of alternative designs are possible. For example, the shape of the stakes 40 is designed with the idea that the stakes would be forcibly driven into the ground.

However, if the user were to dig a hole for the stakes 40, these

elements could be of practically any shape or size, provided they could receive and retain the posts 20.

In the preferred embodiment, the stakes 40 receive and  
5 retain the posts 20 by means of a stake sleeve 42, essentially a cylindrical recess or cavity within the body of the stake 40 having an internal diameter slightly larger than the diameter or width of the post 20 such that the post 20 will be received within and retained by the stake sleeve 42 by means of frictional  
10 contact therebetween.

Ideally, the stake sleeve 42 should be of sufficient length so as to securely receive the post 20, and the length of the portion of the stake 40 that is inserted into the ground should  
15 be sufficient to prevent the post 20 from toppling over when the decorative fencing system 10 is assembled. In the preferred embodiment, the length of the portion of the stake 40 that is inserted into the ground is approximately 10 inches, although longer stakes 40 would function just as well, and shorter ones  
20 may also serve effectively provided the weight of the structural components and posts 20 are not too great, and the ground itself is firm enough to retain the stake 40 therein. Also in the preferred embodiment, the stake sleeve 42 should extend about the ground level by a sufficient height to allow the desired  
25 clearance between the bottom of the structural components 12 and the ground. This is of particular importance for the gate unit

16, since the gate elements 28 must clear any uneven ground so as to allow the elements to open and close properly. Furthermore, the combined weight of the post 20 and any structural components 12 attached thereto serve to force the post 20 within the stake sleeve 42 and prevent the post from sliding out.

The end units 18 serve to provide decorative termination points for the decorative fencing system 10, and as such, include a decorative termination point 44 on the side opposite the vertical element 30 or the side to which the post rings 22 are attached. Rather than use a separate post 20 to anchor the termination point 44 to the ground, a separate stake pin 46 is provided at the termination point 44, which stake pin 46 extends below ground level when the end unit 18 is attached, thereby securing the end of the end unit 18 to the ground. As illustrated in FIG. 1, in the preferred embodiment the stake pin 46 is long and thin to facilitate its insertion into the ground. It is also of approximately the same length as the stake 40, although a shorter stake pin 46 would work just as effectively.

In the preferred embodiment, the components of the decorative fencing system 10 are manufactured from tubular steel, both square and round stock. A powder coat finish may be provided on some or all of the elements. For example, a separate color or finish or a different material, such as bronze colored cast iron, may be used for decorative accents 48 such as finials

50 or decorative ball caps 52. All the steel components are ideally welded in assembly, and the decorative accents 48 may be held in place by force fit, adhesive, welding, some combination thereof or other means known in the art.

5

Alternative manufacturing variations are also contemplated, including manufacturing individual components out of solid iron or steel pieces, welding and finishing by powder coating or painting. The components may be produced as individual cast iron  
10 pieces and finished with various paint techniques to create different appearances.

It should be appreciated that the design of the individual structural components shown in the Figures is just one possible  
15 design for the decorative fencing system 10 of the present invention. A variety of different designs and decorative accents 48 are contemplated, such as a Victorian design or a more modern design. The only limitation is that the design of the system 10 must be embodied by the structural components 12 and tied  
20 together by the posts 20, post rings 22 and post hinges 24.

The process of assembling the fencing system 10 is designed to be simple and easy to alter. In the preferred embodiment, a stake 40 is driven into the ground, and the individual structural  
25 components 12 are held into place above the stake 40. A post 20 is inserted through the post rings 22 and/or post hinges 24, then

inserted into the stake sleeve 42 of the stake 40. The process is repeated as necessary until the desired configuration is achieved, allowing for a potentially infinite number of combinations and angles between the structural components. Some examples of these variations are illustrated in FIG. 3. Since each of the structural components 12 may be purchased separately, the decorative fencing system 10 may be as large or as small as the user, such as a homeowner or landscaper, desires.

Having thus described the invention with particular reference to the preferred forms thereof, it will be obvious that various changes and modifications can be made therein without departing from the spirit and scope of the present invention as defined by the appended claims.